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3937

Diag. Cht. No.

Form 504 U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE DESCRIPTIVE REPORT	
Type of Survey	HYDROGRAPHIC
Field No.	Office NoH-3936 & 3937
LOCALITY	
State	CONNECTICUT
General locality	LONG ISLAND SOUND
Locality	PINE CREEK POINT TO BLACK ROCK HAR- BOR & NORWALK ISLANDS TO PINE CREEK POINT
<u>19A 16</u> CHIEF OF PARTY R. F. Strough	
LIBRARY & ARCHIVES	
DATE	MARCH 16, 1917

B-1870-1 (1)

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. *39366*

State . *Connecticut*

General locality . . *Long Island Sound*

Locality . *Pine Creek Point to Black Rock Harbor.*

Chief of party . *R. P. Strough.*

Surveyed by . *R. P. Strough.*

Date of survey *August 3rd. to Sept. 21st. 1916.*

Scale *1 to 10,000*

Soundings in . . *Feet.*

Plane of reference . . *Mean Low water.*

Protracted by *R.P.S.* . . Soundings in pencil by *W.D. Sutcliffe*

Inked by . *J. U. Torrey* . Verified by *J. U. Torrey*

Records accompanying sheet (check those forwarded):

Des. report, Tide books, _____ Marigrams, Boat sheets,

_____ Sounding books, _____ Wire-drag books, _____ Photographs.

Data from other sources affecting sheet

Remarks: The sheet is forwarded without putting the soundings on as they have not been completely reduced by the tidal section.

The field number of this sheet is No. 2.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 39377

State . Connecticut

General locality Long Island Sound,

Locality . Norwalk Islands to Pine Creek Point.

Chief of party . R. P. Strough,

Surveyed by . . . R. P. Strough.

Date of survey . August 10th to Oct. 3rd. 1916.

Scale 1 to 10,000

Soundings in . . . Feet.

Plane of reference . Mean low water

Protracted by . R. P. S. . . Soundings in pencil by W.D. Sutcliffe

Inked by J. D. Torrey . . Verified by J. D. Torrey

Records accompanying sheet (check those forwarded):

Des. report, Tide books, Marigrams, Boat sheets,

Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks: The sheet is forwarded without putting on the soundings as they have not been completely reduced by the Tidal section.

The field number of this sheet is No. 1.

Div. of Hyd and Top;

I respectfully call to your attention the statement in this report regarding the change in position of the gas and bell buoy off Cokenoe Island.

Respectfully,

R. P. Strough



DEPARTMENT OF COMMERCE

HYDROGRAPHY, ETC. (3)

COAST AND GEODETIC SURVEY.

ASST. IN CHARGE (2)

E. LESTER JONES, SUPERINTENDENT.

C O N N E C T I C U T .

Norwalk Islands to Black Rock Harbor.

A Descriptive Report to Accompany

Hydrographic Sheets Nos. 1 and 2.

Scale 1 to 10,000

1916.

R. P. Strough,

Assistant, C. & G. S.

Chief of Party.

A Descriptive Report to Accompany Hydrographic Sheets Nos. 1 & 2

Long Island Sound, Connecticut.

August and September,

1916.

I have the honor to submit the following report on the hydrographic work done by the party under my charge in accordance with your instructions of July 24th, 1916. The work extends from the meridian 23 \pm 23 along the shore of Connecticut and the Norwalk Islands, where it joins that of Assistant Paul C. Whitney, to the east side of the entrance to Black Rock Harbor and out to and including the seven fathom curve. Split lines were run at intervals of 100 meters or less except on the shoal areas where a close development was made.

GENERAL DESCRIPTION OF THE COAST.

The coast of the mainland in this locality is made up of low rolling hills and has few really distinctive features. There are many summer homes with their cupolas, tanks, windmills, etc. which are very conspicuous and the more pronounced of these have been listed and described. The only place of shelter, for even small boats, within the limits of these sheets are Mill River, which is the entrance to Southport Harbor, and Black Rock Harbor. No survey was made in either of these ports but during the fall of 1916 a private concern was engaged in dredging the channel into Southport and depositing

the product into the marsh S. E. of the breakwater. It is proposed to fill in this area to make a golf links and this work will doubtless considerably change the depths around Southport entrance and in the channel.

MENACES TO NAVIGATION;

Notwithstanding the fact that the original work in this locality was very open, few shoals were found when the system of split lines was run and as far as the offshore dangers are concerned there is very little discrepancy between the chart and the sheet. The 18 foot spot E. S. E. of Copps Island, shown on the chart was verified within a foot. The large area of boulders east of Cokenoe Island was developed very closely and altho the outlines of the shoal will be somewhat changed the depths will be practically the same. The reef off Frost Point was found to extend farther off shore than is shown on the chart as a three foot rock was found about a quarter of a mile from the point in a southerly direction.

The area around Flat Island and Fairfield Bar was developed closely and the exact extent of these areas determined. A close development was made over the 14 foot spot lying about half way between Flat Island and Penfield Reef L.H. but no less water was found. A 13 foot spot was found about one half mile W. x S. (true) from Penfield Reef L. H. A close examination was made of the limits of Penfield Reef and the reef

extending to the southward of Black Rock L. H.

CHANGE IN POSITION OF BUOY;

A sextant position taken at Cokenoe gas and bell buoy shows that the position of that buoy has been changed 440 meters E.N.E. (true) of the position on the chart.

METHODS OF CONTROL.

The ordinary method of hand lead and line was used and the control was obtained principally from the existing triangulation. A few signals however, were determined by sextant angles taken by the sounding party. A list of the signals and the method of their location follows:

NAME of SIGNAL	DESCRIPTION	HOW DETERMINED.
Rig	Copps Island Tripod	Triangulation.
Goose	Goose Island Pole	"
Pek	Pecks Ledge L. H.	"
Cok	Cokenoe Island Tripod	"
Rit	Flag in Tree	Sextant angles
Win	Burnhams Windmill	Triangulation.
Bird	Sherwoods House Chy.	"
Green	Greens Farms Ch. Sp.	"
Sag	Tank and Windmill	Sextant Angles
Doc	Roof of Boat House	" "
Staf	Flag Staff	" "
Ep	Southport Epis. Ch. Sp.	Triangulation.
In	Southport Inner Beacon	"

List of Signals (Continued)

NAME OF SIGNAL	DESCRIPTION	HOW DETERMINED.
Out	Southport Outer Beacon	Triangulation.
Scot	Scotts House Chimney	"
Cop	Fairfield Episcopal Ch. Sp.	"
Pen	Penfield Reef L. H.	"
Gab	Gable on House	Sextant Angles.
Stak	Stack at Black Rock	" "
Kim	Chimney in West Bridgeport	" "
Tank	Tank in West Bridgeport	" "
Lak	Black Rock Harbor L. H.	Triangulation.
Port	Bridgeport Harbor L. H.	"

TABLE OF STATISTICS.

Hydrographic Sheet Number 1.

DAY	DATE	NO. STATUTE MILES	NO. OF POSITIONS	NO. OF SOUNDINGS.
A	Aug. 10	6	41	166
B	" 11	18.4	118	562
C	" 12	8.6	70	315
D	" 14	22.1	142	687
E	" 15	22.4	117	552
F	" 17	10.6	71	283
G	" 18	18.3	88	502
H	" 21	23.1	107	793
J	" 22	29.3	133	921
K	" 25	15.5	95	1055
L	" 30	17.5	116	891
M	Sept. 1	12.3	82	360
N	" 9	15.7	75	487
O	" 11	5.3	37	167
P	" 12	35.0	164	1251
Q	" 13	12.4	82	472
R	" 18	16.9	127	807
S	Oct. 3	<u>10.4</u>	<u>197</u>	<u>368</u>
TOTAL		299.8	1862	10639.

TABLE OF STATISTICS.

Hydrographic Sheet Number 2.

DAY	DATE	NO. STATUTE MILES	NO. OF POSITIONS	NO. OF SOUNDINGS.
A	Aug. 3	10.7	94	412
B	" 4	10.1	76	358
C	" 5	10.5	80	357
D	" 6	2.3	17	89
E	" 23	9.5	64	421
F	" 29	32.6	174	1060
G	Sept. 7	14.3	73	523
H	" 15	4.5	26	199
J.	19	23.2	177	972
K	21	<u>20.5</u>	<u>135</u>	<u>865</u>
TOTAL		138.2	816	5266

TOTAL sheets

1 and 2

438.0

2778

15895.

Respectfully Submitted

N. P. Strong

Assistant C. & S. Survey

Chief of Party.

DEPARTMENT OF COMMERCE

Hydrographic Sheet No. 3936.
Black Rock Harbor to Frost Pt. Conn.

The positions for the work on this sheet were protracted by the field party and have been taken as correct but only a few verifications being made as nothing appeared to indicate errors.

The soundings were pencil plotted in the office by Mr. Sutcliffe and found to be generally correct.

The field work appears good and when compared with previous work appears sufficient to develop the bottom with a fair degree of accuracy.

A combination of the work on this sheet and Sheets No 1750 and 1575 of 1885 + 1883 respectively show but little if any change except at the east of Black Rock Light where a considerable change is noted, the reason for which is not apparent at this time. It may be possible that the quite recent dredging in Black Rock Harbor has been dumped here as has been done at the East of Southport breakwater as recorded by the field party in his "Description Report". In this particular case additional lines should have been run in order to develop the limits of these changes.

In Black Rock and Southport Harbors some dredging has been done and is shown on Engineers blue prints 14735 + 16612 respectfully.

John D. Tomney
11/30/17

DEPARTMENT OF COMMERCE

Hydrographic Sheet No. 3937.
Frost Point to Norwalk Id. Conn.

The positions for the work on this sheet were protracted by the field party and have been taken as correct being verified only in a few instances; When verified the work was found correct.

The soundings were plotted in the office by Mr. Sutcliffe and generally found accurate.

The work of the field party is good, the ground being sufficiently well covered to develop conditions in a satisfactory manner; A comparison with previous work shows that but little, if any, change has occurred.

John D. Torrey
12/1/17

VEC
April 9, 1917

100
B.P.
1917

HYDROGRAPHIC SHEET 3936.

Long Island Sound, Pine Creek Point to Black Rock Harbor,
Connecticut, by Assistant R. P. Strough in 1916.

TIDES.

	Bridgeport Feet.
Mean low water, or plane of reference on staff	1.4
Mean range of tide	6.8

VEC
April 9, 1917

P.S.
R.P.S.
1917

HYDROGRAPHIC SHEET 3937.

Long Island Sound, Norwalk Island eastward, Connecticut,
by Assistant R. P. Strough in 1916.

TIDES.

	Bridgeport Feet.
Mean low water, or plane of reference on staff	1.4
Mean range of tide	6.8